

BEHNIACEAE (MAGNOLIOPHYTA), A NEW FAMILY OF ASTELIALES
(LILIOPSIDA)

James L. Reveal

Norton-Brown Herbarium, H.J. Patterson Hall, University of Maryland, College
Park, Maryland 20742-5815 U.S.A.

ABSTRACT

A new family of flowering plants, **Behniaceae**, is proposed for a single genus of South Africa plants, *Behnia*, belonging to the monocotyledonous order Asteliales. The family is most closely related to Geitonoplesiaceae, Luzuriagaceae, and Philesiaceae, and may be distinguished by an urceolate, sympetalous corolla, 2-3 ovules per locule, and woody stems with alternating cladophylls.

KEY WORDS: *Behnia*, Behniaceae, Magnoliophyta, Liliopsida, new family

The first to propose recognition of a small family for the South African genus *Behnia* Didrichs., was the late Rolf Dahlgren. The name was published initially by Gertrud Dahlgren (1989) as a *nomen nudum*. Currently, Dahlgren (1985), Takhtajan (1987, 1997) and Wielgorskaya (1994) place the genus in Luzuriagaceae, while Cronquist (1981, 1987), Gunn, *et al.* (1989), and Mabberley (1989) refer the genus to Smilacaceae. In 1992, Thorne considered the genus a taxon *incertae sedis*, but now wishes to recognize the family and has asked me to validate the name. While Thorne prefers to include the family in an expanded order Asparagales with Geitonoplesiaceae, Luzuriagaceae, and Philesiaceae, my own view is that these families are better placed in the order Asteliales next to a more narrowly defined Asparagales.

Behniaceae R. Dahlgren *ex* Reveal, *fam. nov.*

Luzuriagaceis affinis sed phyllocladodiis, florum tubo urecolato, ovarisque loculis 2-3 ovulatis diversea. - Plantae perennes; caule cladodiis sessilibus instructo. Flores laxe subcymoso-racemosi vel cymosis, pedicello gracilibi secus bracteato elevati. Perianthium viridi-flavescens, ureceolatum breviter lobatum, tubo late cylindrico ad orem contracto; stamina 6, tubo medio affixa, perianthio breviora; ovarium basi in gynophoram crassam contractum, 3-

loculare , loculo unoquoque 2-3 ovulato. Semina subglobosa. - Genus unicum
monotypicum: *Behnia* Didrichs.

ACKNOWLEDGMENTS

I wish to thank Rupert C. Barneby for his review of the manuscript and the Latin diagnosis and description., and Robert F. Thorne for his comments.

LITERATURE CITED

- Cronquist, A.J. 1981. *An Integrated System of Classification of Flowering Plants*. New York, New York.
- Cronquist, A.J. 1988. *The Evolution and Classification of Flowering Plants*, 2nd edit. Bronx, New York.
- Dahlgren, R.M.T., H.T. Clifford, & P.F. Yeo. 1985. *The Families of the Monocotyledons: Structure, Evolution, and Taxonomy*. New York, New York.
- Dahlgren, G. 1989. An updated angiosperm classification. *J. Linn. Soc. Bot.* 100:197-203.
- Gunn, C.R., J.H. Wiersema, C.A. Ritchie, & J.H. Kirkbride, Jr. 1992. Families and genera of spermatophytes recognized by the Agricultural Research Service. *U.S.D.A. Techn. Bull.* 1796.
- Mabberley, D.J. 1987. *The Plant-book: A Portable Dictionary of the Higher Plants*. Cambridge, Great Britain.
- Takhtajan, A.L. 1985. *Anatomia seminum comparativa*. Tomus I. Liliopsida seu monocotyledones. Leningrad, U.S.S.R.
- Takhtajan, A.L. 1997. *Diversity and Classification of Flowering Plants*. New York, New York.
- Thorne, R.F. 1992. Classification and geography of the flowering plants. *Bot. Rev.* 58:225-348.
- Wielgorskaya, T. 1995. *Dictionary of Generic Names of Seeds Plants*. Columbia University Press, New York, New York.